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For Immediate Release

FCC RELEASES SIXTH 'MEASURING BROADBAND AMERICA' REPORT

Nationwide test of fixed broadband services examines actual versus advertised speeds

WASHINGTON, December 1, 2016 – The Federal Communications Commission today released the results of its ongoing nationwide performance study of consumers' fixed broadband Internet access service in its sixth "Measuring Broadband America" report. The report furthers the Commission's efforts to provide greater transparency about network performance to help consumers make more informed choices about their Internet Service Provider.

This year's report shows that broadband speed offerings to the average consumer continue to increase at a rapid pace, and broadband service providers generally are delivering actual speeds that meet or exceed advertised speeds. However, results are not uniform across technologies. The report finds a growing disparity in advertised download speeds between many DSL-based broadband services and most cable- and fiber-based broadband services. Average DSL speeds have increased only slightly over the past five years and satellite speeds, over a shorter time interval, have remained constant.

This year's report highlights the following findings:

- Significant growth in advertised broadband speeds available to consumers, though the results are not uniform across technologies. The median download speed, averaged across all participating ISPs, has almost quadrupled, from approximately 10 Mbps in March 2011, to approximately 39 Mbps in September 2015. Compared to last year's value of 32 Mbps, this year's median download speed was an increase of approximately 22%. We find that, over the course of our reports, the average annual increase in median download speeds by technology 47% for cable, and 14% for fiber, while popular DSL speeds have remained largely the same. The maximum advertised download speed among the most popular service tiers using cable technologies, increased from 20-30 Mpbs in March 2011 to 100-300 Mpbs in September 2015.
- Actual speeds experienced by most consumers meet or exceed advertised speeds. All ISPs using cable, fiber or satellite technologies advertise speeds for services that on average are close to the actual speeds experienced by their subscribers. Fixed cable and fiber broadband customers experienced speeds that were 100% or better than advertised. However, the actual speeds experienced by subscribers of some ISPs satellite technologies were lower on average than the advertised "up-to" speeds for their respective providers. This is likely the result of increased subscribership and consumer usage of these services. Future proposed launches of more advanced satellites would likely reverse this trend.

- Consumers with access to faster services continue to migrate to higher service tiers. Data shows that panelists subscribed in September 2014 to service tiers with advertised download speeds between 15 Mbps to 50 Mbps are the most likely to have migrated towards higher service tiers. In contrast, among panelists subscribed in September 2014 to service tiers with advertised download speeds of less than 15 Mbps offered mostly by DSL services only a few percent migrated within the following year to a service tier with a higher download speed.
- Latency and packet loss vary by technologies. Consumers generally experienced low latency the time it takes for a data packet to travel from one point to another in a network on DSL, cable and fiber systems. Higher latency in satellite services may affect the perceived quality of highly interactive applications such as VoIP calls, video chat and multiplayer games. Consumers generally experienced low packet loss the percentage of packets that are sent by the source but not received by the destination on cable, satellite and fiber systems. Moderate packet loss experienced by a few DSL providers may affect the perceived quality of video chat, multiplayer games and video streaming.

About the Measuring Broadband America Report

The FCC released the first Measuring Broadband America Report in August 2011. That report covered data collected in March 2011 and found that most broadband providers who participated in the study were providing over 80% of advertised speeds during peak usage periods.

Thirteen ISPs voluntarily participated in the 2016 study, representative of more than 80% of American broadband subscribers. They include AT&T, CenturyLink, Charter Communications, Comcast, Cox, Frontier, Mediacom, Optimum, Time Warner Cable, Verizon, ViaSat, and Windstream. The participating ISPs collectively account for over 80% of U.S. residential broadband Internet connections.

This year, the Commission updated the methodology to better represent typical performance by using medians in place of averages (arithmetic means) for our report. Medians are not as influenced by extreme values as averages and therefore can better represent a typical user's performance. In the report, we also analyzed the impact of this change on our overall metrics. We continue to provide our calculated averages in our public spreadsheets to maintain continuity of data.

The FCC began measuring broadband performance in response to recommendations in the National Broadband Plan. Since then, by continuing to shine a spotlight on actual versus advertised speeds, the FCC is ensuring accountability, increased transparency and enhancing competition in the marketplace. The report is part of a comprehensive series of initiatives that draw upon cooperation between the Commission, industry, and other stakeholders to promote transparency and ensure that consumers get the information they need to make informed marketplace decisions.

To read the complete 2016 Measuring Broadband America report, visit: https://www.fcc.gov/reports-research/reports/measuring-broadband-america/measuring-fixed-broadband-report-2016.

A consumer guide to broadband speeds can be found at: http://www.fcc.gov/guides/broadband-speed-guide